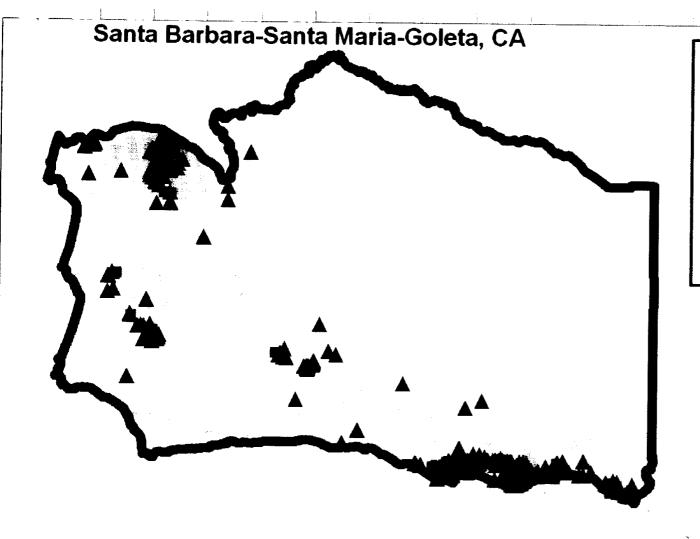
, other gas			
•			
~ .			
₩## 			
er			
en ma			
one or			
. mai			
am.			
_			
-num-			
			
Manage,			
and the second s			
_			



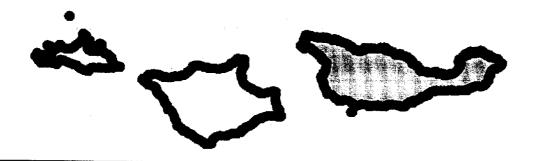
COs Served by Known CLEC Fiber, Known CLEC Lit Buildings, and CLEC Customers Served Using Special Access

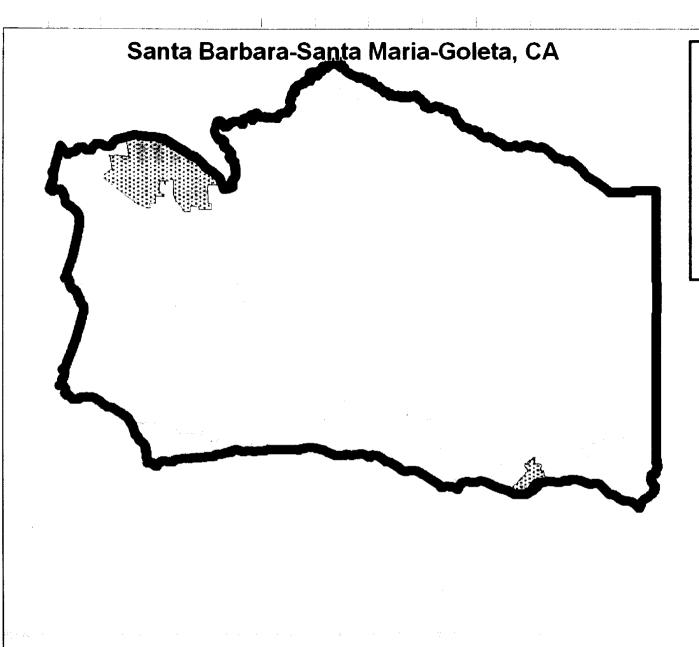
- Customers of 5 Select CLECs
 Served Using Verizon Special Access
- Known CLEC Lit Building
 Overlayed on Special Access Data

Within MSA Boundary.

Venzon Service Territory
Venzon COs Served by Known CLEC Fiber

Non-Verizon Service Territory





COs Served by Known CLEC Fiber

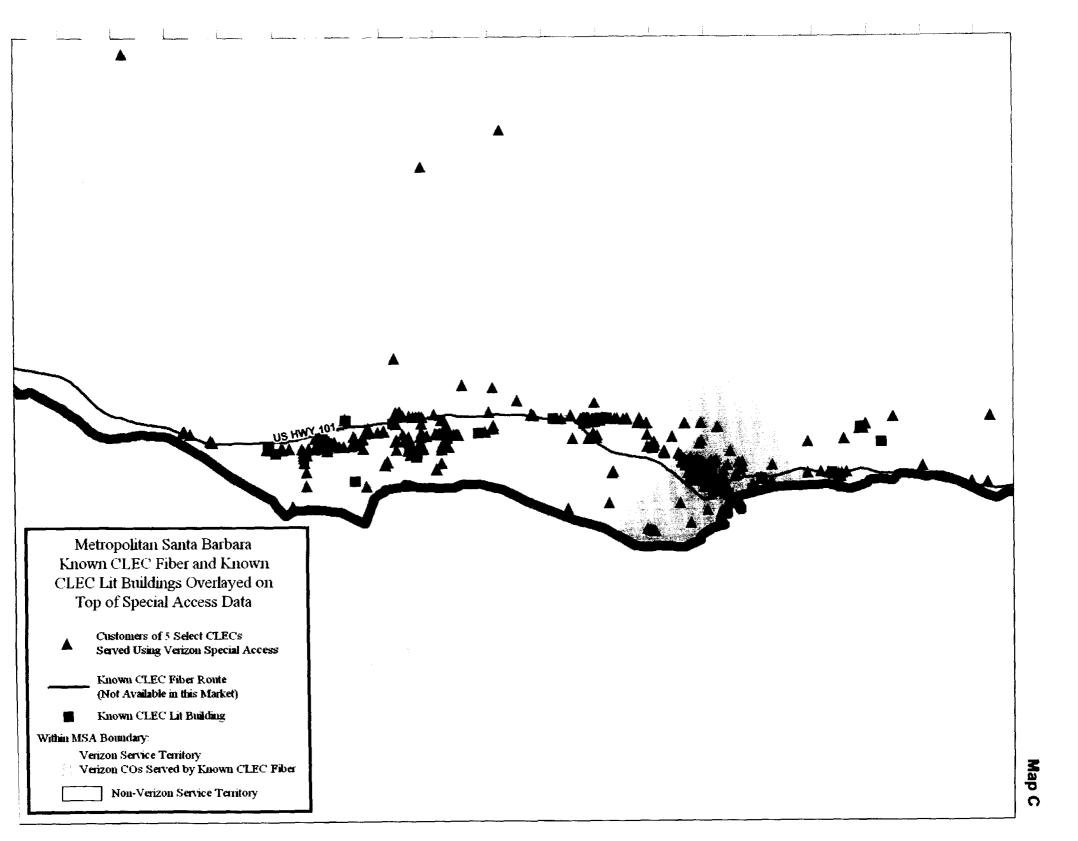
Known CLEC Fiber Route (Not Available in this Market)

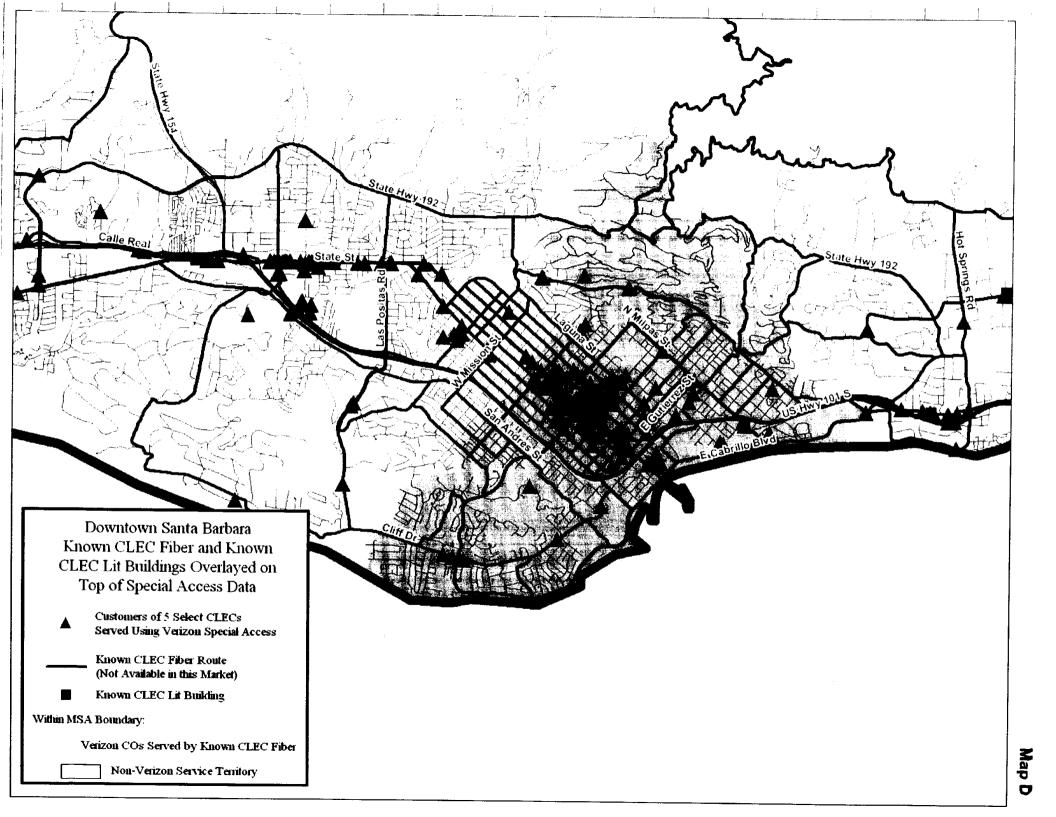
80 Percent of Special Access
Demand for High Cap Services

Within MSA Boundary:

Verizon Service Territory
Verizon COs Served by Known CLEC Fiber

Non-Venzon Service Territory





Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

RECEIVED

OCT - 4 2004

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

In the Matter of

Unbundled Access to Network Elements

Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers WC Docket No. 04-313

CC Docket No. 01-338

ATTACHMENTS TO VERIZON COMMENTS

VOLUME 3

MASS-MARKET SWITCHING AND OTHER ISSUES

Tab	Declarant	Subject
I	Michael K. Hassett and Vincent J. Woodbury	Competitive Developments
J	Ronald H. Lataille	Competitive Data
K	Thomas Maguire	Hot Cuts
L	William E. Taylor	Hot Cuts
M	Peter J. Castleton	Line Sharing
N	Thomas E. Church	Remote Terminal Collocation

Promot			
·			
·			
	•		

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of)	
Unbundled Access to Network Elements)	WC Docket No. 04-313
Review of the Section 251 Unbundling)	CC Docket No. 01-338
Obligations of Incumbent Local Exchange)	
Carriers)	

DECLARATION OF MICHAEL K. HASSETT AND VINCENT J. WOODBURY

- 1. My name is Michael K. Hassett. My business address is 13100 Columbia Pike, Silver Spring, Maryland. I am employed by Verizon Communications as Senior Vice President Product Management. In this capacity, I am responsible for life-cycle management and product standardization of traditional mass-market wireline products, including traditional voice telephone services.
- 2. I have more than 23 years of experience in the telecommunications industry in a variety of marketing and sales positions. Prior to my current position, I served as Vice President Business Marketing, where I was responsible for developing marketing strategies and customer loyalty, acquisition and winback strategies. My education background includes a MBA from Selinger School at Loyola College and a BA from Adelphi University.
- 3. My name is Vincent J. Woodbury. My business address is 1095 Avenue of the Americas, 36th Floor, New York, New York. I am employed by Verizon Services Corporation as Director, Regulatory Support for Retail Markets Group. In this capacity, I

am responsible for providing support and oversight to Consumer and Small Business services provided in state and federal jurisdictions throughout the Verizon footprint.

4. I have more than 25 years of experience in the telecommunications industry in a variety of retail marketing and sales channel positions. My educational background includes a Masters Degree in Liberal/Social Sciences received in 1977 and a Bachelors Degree received in 1972.

I. Purpose of Declaration

- 5. The purpose of our declaration is to describe the recent technological and market developments that further demonstrate that competitors are not impaired without access to unbundled switching. Since the *Triennial Review* proceeding, there has been widespread deployment of competing voice telephone services by cable companies and Voice over Internet Protocol ("VoIP") providers, as well as increasing competition from wireless and other intermodal providers. As explained in greater detail in the sections that follow, these developments conclusively show that competition is not impaired without access to unbundled mass market switching.
- 6. As a general matter, competition is not impaired without unbundled switching nationwide. At the end of last year, cable companies already offered voice telephone service to 15 percent of homes nationwide, and were rolling out VoIP to many more. By the end of 2004, cable companies plan to offer VoIP to more than 24 million homes over their networks, over 40 million by the end of next year, and over 90 million by the end of 2006.
- 7. Regardless of whether cable companies themselves offer VoIP, the approximately 90 percent of U.S. homes that have access to cable modern service also

have access to VoIP from multiple providers ranging from the major long distance carriers, like AT&T, to national VoIP providers, like Vonage.

- 8. Wireless carriers are also aggressively competing both for lines and for traffic. Since the *Triennial Review*, the number of wireless lines has grown from 129 million to 161 million, while the number of wireline lines has declined. The percentage of users giving up their landline phones has grown from 3-5 percent to 7-8 percent. In addition, wireless traffic has grown from 16 to 29 percent of all voice traffic and to 43 percent of long distance traffic.
- 9. These developments are particularly pronounced in the areas served by Verizon as the incumbent carrier. Cable companies already offer voice telephone service, either circuit-switched or VoIP, to more than 18 million homes in Verizon's service areas. Regardless of whether cable companies themselves offer VoIP, approximately 92 percent of the population in Verizon's 50 top MSAs (based on number of access lines) now have access to cable modem service, and therefore also have access to VoIP from numerous alternative VoIP providers at competitive prices.
- 10. Wireless service is available from multiple competing providers in Verizon's 50 top MSAs. And wireless prices are directly competitive with wireline voice telephone service.
- 11. These developments show that competitors are already providing significant and widespread competition for mass market local telephone services without using Verizon's unbundled local switching services. In fact, competitors are providing voice telephone services to mass market customers without using circuit switches at all.

Accordingly, competing carriers can provide voice service to the mass market and are not impaired without access to incumbent carriers' local switches.

12. Our declaration and the Exhibits to our declaration contain information collected from publicly available sources as well as information collected from internal Verizon databases. The sources of publicly available information used are identified in these documents. In his declaration, Mr. Lataille describes the information collected from internal Verizon databases. *See* Attachment J.

II. Rapid Growth of Competition from Intermodal Sources.

13. Cable companies, independent VoIP providers and wireless carriers are aggressively competing for mass market voice telephone customers. They are doing so by using their own facilities and are not using the incumbent carriers' unbundled switching.

Cable Companies.

- 14. Two years ago, cable companies already offered circuit switched voice telephone service to approximately 10 million homes across the country. Since that time, the deployment of competing telephone services by cable companies has expanded exponentially as cable companies roll out VoIP service over their cable networks.
- 15. As of the end of 2003, cable companies already offered circuit-switched voice telephone service to 15 percent of homes nationwide.² The number of lines for

¹ J. Bazinet & D. Pinsker, JP Morgan H&Q, The Cable Industry at Table 22 (Nov. 2, 2001); NCTA, Cable Telephony: Offering Consumers Competitive Choice at 2 (July 2001). See also Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, ¶ 52 (2003).

² See, e.g., J. Halpern, et al., Bernstein Research Weekly Notes, US Telecom and Cable: Faster Rollout of Cable Telephony Means More Risk for RBOCs, Faster Growth for

which cable telephony was available is even greater because many homes have more than one line.

- 16. Cable companies now offer voice telephone service to millions of additional homes using VoIP. By the end of 2004, cable companies plan to offer VoIP to more than 24 million homes over their networks (nearly a quarter of all U.S. households), over 40 million by the end of next year (more than one-third of all U.S. households), and over 90 million by the end of 2006.³
- 17. Analysts expect all the major cable companies to offer VoIP to nearly 100 percent of their cable homes passed over the next two to three years. Within two years, "roughly 82% of total U.S. households" will be able to obtain telephone service from their cable operator. Analysts project that cable operators will capture as much as 10 percent of current residential telephone lines by the end of 2007, and more than 15 percent of primary residential telephone lines by 2008.
- 18. While cable companies are aggressively competing for mass market customers across the country, this competition is particularly advanced in the areas where Verizon provides local telephone services. Verizon estimates that cable companies

Cable, at Exh. 1 (Jan. 9, 2004) ("Bernstein Cable Telephony Report") (estimating 15 percent of U.S. households as of year-end 2003).

³ See UNE Fact Report 2004 submitted by BellSouth, Qwest, SBC, and Verizon, WC Docket No. 04-313, CC Docket No. 01-338, at I-5.

⁴ See Bernstein Cable Telephony Report at 3; see also J. Hodulik, et al., UBS, High-Speed Data Update for 3Q03 at 12 (Dec. 1, 2003) ("By the end of 2005/2006" the four major cable operators "will have rolled out a cable telephony service across substantially all of their respective footprints, representing total homes of approximately 70 million").

⁵ Bernstein Cable Telephony Report at 4.

⁶ F. Governali, et al., Goldman Sachs, Cable Telephony/VoIP Threat Evolves, But Shouldn't Be Catastrophic at 1 (Apr. 16, 2004).

⁷ Bernstein Cable Telephony Report at 1.

already offer voice telephone service – either circuit-switched or VoIP – in markets that reach more than 18 million homes in Verizon's service areas, and have announced that they will offer service on a much wider basis by the end of this year. Each of the major cable companies has major concentrations of customers in Verizon's service areas, and either already is offering or is in the process of rolling out voice telephone service to large numbers of customers. See Exhibit 1.

- 19. Cablevision was the first cable company to offer VoIP service throughout its service area in New York and New Jersey. Verizon estimates that Cablevision now offers VoIP to 4.4 million homes it passes in metropolitan New York, southern Connecticut, and New Jersey. Cablevision is adding 3,400 VoIP customers in the New York metropolitan area per week. 10
- 20. Cablevision offers unlimited local and long distance telephone service for \$34.95.¹¹ Cablevision also recently rolled out a new bundled offering that includes unlimited local and long distance telephone calls plus digital cable and high speed Internet access for \$89.85.¹² This is about the same amount many of its customers

⁸ Verizon's calculations of the number of homes passed by cable companies in Verizon's service areas are based on the aggregate of the number of homes passed by a cable company in each county that is part of the MSA in Verizon's service area in which that company is offering telephony. Homes passed data were obtained from Media Business Corp., Top 10 MSOs by County (Mar. 2004). Verizon included only those counties within an MSA that are within its service area.

⁹ See Cablevision News Release, Cablevision Completes Network Rebuild (Dec. 3, 2003).

¹⁰ See A. Bourkoff, et al., UBS, Cablevision Systems: 2Q04 Results Ahead of Expectations at Table 6 (Aug. 10, 2004).

¹¹ See Optimum Voice, Pricing, http://www.optimumvoice.com/index.jhtml?pageType=pricing.

¹² See Cablevision Promotional Offer for New Customers Features Digital Video, High-Speed Internet and Voice Services for the Monthly Price of \$29.95 Each for First 12 Months If Taken Together, PR Newswire (June 21, 2004).

already pay just for digital cable and high speed Internet access. As a result, Cablevision says that customers "are essentially receiving their voice service for free." ¹³

- 21. Time Warner now offers VoIP in 30 of its markets, and is "on track to be fully launched in all divisions" which pass a total of 19 million homes "by year-end 2004." Verizon estimates that Time Warner's systems pass approximately 8 million homes in Verizon's service areas including nearly 3.5 million homes in New York; 2.6 million homes in Texas; 771,000 homes in California; 236,000 homes in Pennsylvania; 169,000 homes in North Carolina; 157,000 homes in Maine; 153,000 homes in Wisconsin; 77,000 homes in New Jersey; 56,000 homes in Florida; 45,000 homes in Indiana; 34,000 homes each in Massachusetts, and West Virginia; and 22,000 homes in New Hampshire. See Exhibit 1. As of mid-August 2004, Time Warner was signing up 1,200 VoIP customers per day. 15
- 22. Comcast already offers circuit-switched voice telephone service to approximately 9.8 million homes. Comcast plans to upgrade half of the 40 million homes passed to provide VoIP service by the end of 2004, and 95 percent of homes passed by the end of 2005. To

¹³ Cablevision To Offer Internet Phone-Call Bundle, Wall St. J. at B5 (June 21, 2004) (quoting Patricia Gottesman, Senior Vice President, consumer product management and marketing, Cablevision).

¹⁴ Glenn Britt, Chairman and CEO, Time Warner Cable, presentation at the Merrill Lynch Media & Entertainment Conference at 3, 20 (Sept. 28, 2004).

¹⁵ See M. Stump, Technology's Creative Master, Multichannel News (Sept. 27, 2004) (quoting Time Warner Cable chief technology officer Mike LaJoie).

¹⁶ See Comcast Corp. Financial Tables at Table 5, attached to Comcast Press Release, Comcast Reports First Quarter 2004 Results (Apr. 22, 2004).

¹⁷ See Financial Tables attached to Comcast Press Release, Comcast Reports Second Quarter 2004 Results (July 28, 2004); Comcast Corporation Shareholders Meeting – Final, FD (Fair Disclosure) Wire, Transcript 052604az.779 (May 26, 2004); Comcast

- 23. In Verizon's service areas, Verizon estimates that Comcast already offers circuit-switched voice telephone services to approximately 6 million homes throughout eastern Massachusetts, in Pittsburgh, Richmond, Alexandria, Portland, Chicago, Dallas, Seattle, Los Angeles, and Orange County. Comcast offers local and long distance telephone service for \$49.99 or less. See Exhibit 2.
- 24. Comcast has not announced publicly the order in which it will roll out VoIP service over its systems. If its VoIP rollout in Verizon's service areas reflects the national average, Comcast will be ready to offer VoIP to 8 million homes in Verizon's service areas by year-end 2004. Comcast will be able to offer VoIP to more than 15 million homes it passes in Verizon's service areas by 2006.
- 25. Cox already offers circuit-switched voice telephone service and VoIP to more than half of the 10 million homes it passes nationally, covering 13 of its major markets.¹⁹ Cox is now moving to roll out VoIP service in additional markets.²⁰
- 26. In Verizon's service areas, Verizon estimates that Cox already offers its circuit-switched voice telephone service to approximately 1.7 million homes, including the entire state of Rhode Island and its service areas in Fairfax, Virginia, the Tidewater

Presentation at the Merrill Lynch Telecommunications, Media & Technology Conference at 16 (June 10, 2004), http://media.corporate-ir.net/media_files/irol/11/118591/presentations/061004.pdf.

¹⁸ CED inDEPTH, Advanced Services Deployment Handbook at 14 (Mar. 2004); Comcast Phone of Massachusetts, Inc., Massachusetts Tariff No. 1; Comcast Phone of California, LLC, Schedule Cal. P.U.C. No. 1.

¹⁹ Cox Communications Inc. Operating Statistics, attached to Cox News Release, Cox Communications Announces First Quarter Financial Results for 2004 (Apr. 29, 2004).

²⁰ See Cox Communications, Presentation at Merrill Lynch Telecom, Media & Technology Conference, Cox Communications: Continuing Growth Momentum at 24 (June 10, 2004) ("Plan to launch at least 3-4 more VoIP phone markets in 2004").

region of Virginia and Orange County, California.²¹ Cox also offers VoIP to approximately 77,000 homes in the Roanoke MSA.²² Cox offers local and long distance telephone service for \$49.95 or less. *See* Exhibit 2. In addition, in Roanoke, VA, Cox now offers "Basic Line" – bare bones, local VoIP service – for \$13.59 per month on a stand-alone basis, or \$12.20 per month for customers that subscribe to multiple Cox services.²³

- 27. Charter has announced that it plans to offer VoIP services to at least one million of the homes it passes nationally in 2004.²⁴ In Verizon's service areas, Charter plans to begin providing VoIP service in Massachusetts, where its network passes 284,000 homes, in the fourth quarter of this year.²⁵ Charter has signed wholesale agreements with Level 3 and Sprint to support its retail VoIP services.²⁶
- 28. Starpower/RCN offers circuit-switched voice telephone service in its service areas in New York City, eastern Massachusetts, Philadelphia, Lehigh Valley, and in the metropolitan Washington DC area.²⁷ RCN offers its Megaphone service with unlimited local and long-distance service for \$60.00 or less. *See* Exhibit 2.

²¹ Cox News Release, Cox Communications Brings Digital Telephone Service to Northern Virginia; Northern Virginia Marks Cox's 13th Telephone Market (Apr. 30, 2004).

²² Id.; Media Business Corp., Top 10 MSOs by County (Mar. 2004).

²³ Cox, Digital Telephone, *Roanoke, Pricing*, http://www.cox.com/roanoke/telephone/pricing.asp.

²⁴ See Charter Communications Presentation, Second Quarter Results at 9 (Aug. 9, 2004).

²⁵ Charter Communications, *1Q04 Results* at 11 (May 10, 2004) (presentation of Charter president and CEO Carl Vogel), http://media.corporate-ir.net/media_files/nsd/chtr/presentations/chtr_051004.pdf.

²⁶ Charter News Release, Charter Taps Three Telephone Partners; Level 3, Sprint and Accenture To Enhance, Expedite Charter Telephone (Aug. 30, 2004).

²⁷ RCN Corp., Form 10-K (SEC filed Mar. 30, 2004).

- 29. Cable companies are aggressively targeting both residential and business customers. For example, "[Cablevision] Lightpath has become the preferred provider of voice, data, and Internet services for more than 4,000 businesses throughout Long Island, Westchester County, New York City, Connecticut, and New Jersey."²⁸
- 30. Cox Business Services provides data, voice, and transport services to more than 100,000 customers.²⁹ More than 320,000 businesses lie within 100 feet of Cox's network, providing Cox a "[s]ignificant opportunity."³⁰
- 31. RCN has "signed several agreements to expand its business" to provide "voice, video, data, business cable, Internet access, transport," to "customers including universities, hospitals, and the financial and legal industries." Charter states that it has "over 600,000 small- and medium-sized businesses located within reach of our networks." And Time Warner has "an infrastructure there that is just ripe for commercial services We pass 1.2 million businesses"33

VoIP Providers.

32. Regardless of whether cable companies themselves offer voice telephone service in a particular area, any customer who has access to cable modem or other broadband services also has access to VoIP from multiple providers. VoIP vastly

²⁸ Lightpath, About Lightpath, http://www.lightpath.net/Interior7.html.

²⁹ Cox News Release, Cox Communications Announces First Quarter Financial Results for 2004 (Apr. 29, 2004).

³⁰ Jim Robbins, President and CEO, Cox Communications, Presentation to the Sanford Bernstein 19th Annual Strategic Decisions Conference (June 5, 2003).

³¹ See Comm. Daily at 7-8 (Feb. 2, 2004).

³² A. Figler, *Turning Businesses into Customers*, CableWorld (Dec. 9, 2002) (quoting Charter Communications spokesman David Andersen).

³³ Id. (quoting Ken Fitzpatrick, senior vice president of commercial services for Time Warner Cable).

expands the number of competitors that can offer mass market voice telephone service because they can offer VoIP over any type of broadband facility provided by any other company. This allows customers to bypass the incumbent local exchange carrier's telephone services wherever cable modem service is deployed.

33. For long-distance carriers, VoIP appears to be the chosen method for serving the mass market. AT&T is already providing service in at least 121 major markets in 39 states and the District of Columbia, ³⁴ covering 62 percent of U.S. households. ³⁵ AT&T's entry into "100 major markets in less than four months since service introduction" "demonstrates the velocity at which [AT&T is] working to get IP technology into the hands of consumers." ³⁶ AT&T projects it will have one million VoIP subscribers by the end of 2005. ³⁷ In addition, AT&T has recently entered into marketing agreements with four major cable operators (Comcast, Time Warner, Cox, and Adelphia) to facilitate the ability of customers without broadband service to sign up simultaneously for broadband and VoIP, ³⁸

³⁴ See AT&T News Release, AT&T CallVantage Service Expands to 21 New Markets in Seven States in Nationwide Deployment (Aug. 19, 2004).

³⁵ AT&T News Release, AT&T Lowers Price of Its Residential VoIP Service (Sept. 30, 2004).

³⁶ AT&T News Release, AT&T CallVantage Service Now Available in New Hampshire (July 19, 2004) (quoting Cathy Martine, AT&T senior vice president for Internet Telephony, Consumer Marketing and Sales).

³⁷ AT&T News Release, AT&T's CallVantage Service Expands To Serve the Western United States (May 17, 2004).

³⁸ See J. Hu, AT&T Strikes VoIP Deals with Cable, CNET News.com (Aug. 19, 2004), http://news.com.com/AT%26%2338%3BT+strikes+VoIP+deals+with+cable/2100-7352_3-5316842.html?tag=nl; AT&T News Release, AT&T To Offer AT&T CallVantage Service with Adelphia High-Speed Internet Access (Sept. 1, 2004).

- 34. Sprint will be completing calls for the VoIP service offered by Time Warner Cable; Charter; Mediacom, the nation's eighth largest cable operator; and USA Companies, a small cable operator in the western United States.³⁹
- 35. Level 3 launched a wholesale service that provides carriers with all the building blocks needed to provide residential VoIP service. Level 3's wholesale service is currently available in 50 U.S. markets, and will reach over 300 markets by the end of 2004. Level 3 has signed an agreement with Charter to provide wholesale VoIP services. AOL is currently testing Level 3's service and is expected to launch a consumer offering in 2005. Net2Phone, Skype and 8x8 have also announced plans to use Level 3's wholesale services for VoIP.
- 36. Cable modem service and other broadband services are widely available both nationally and in Verizon's service areas in particular. Approximately 90 percent of

³⁹ See Sprint News Release, Sprint, Time Warner Cable Sign Agreement that Helps Enable Time Warner Cable To Offer Telecom Services (Dec. 8, 2003); Sprint News Release, Mediacom Communications and Sprint Announce Agreement for Mediacom To Provide Telephony Services (Aug. 25, 2004); A. Breznick, Three More MSOs Tap Sprint for Quick VoIP Rollouts, Cable Datacom News (Oct. 1, 2004), http://cabledatacomnews.com/oct04/oct04-2.html.

⁴⁰ See Level 3 Press Release, Level 3 Launches Residential VoIP Service in More than 50 U.S. Markets (May 3, 2004).

⁴¹ Level 3 News Release, Level 3 To Provide Voice Services to Charter (Aug. 30, 2004).

⁴² See J. Hu, et al., AOL Testing Net Phone Service, CNET News.com (Aug. 30, 2004), http://news.com.com/AOL+testing+Net+phone+service/2100-7352_3-5330183.html.

⁴³ See Net2Phone Press Release, Net2Phone Teams with Level 3 To Expand Cable VoIP Offerings (May 3, 2004); Level 3 Press Release, Level 3 Enabling Skype Through New Voice-over-IP Service Agreement (July 23, 2004); Level 3 Press Release, 8x8 Teams with Level 3 To Enhance Residential VoIP Services (June 14, 2004).

- U.S. households are now able to obtain a broadband connection from a provider other than their incumbent local telephone company, principally cable modem service.⁴⁴
- 37. In the 50 top MSAs where Verizon provides local telephone service as an incumbent, cable modem service is available to roughly 92 percent of the population. *See* Exhibit 3. The areas where cable modem service is available in Verizon's 50 top MSAs are shown on Maps B (Attachment O). Verizon identified the cable systems offering cable modem service from Warren Communications' *Cable Factbook* and publicly available information and then mapped the areas served by those systems within each MSA.
- 38. Mass market customers are buying broadband service at a remarkable rate. About 28 million customers 25 percent of U.S. households currently subscribe to broadband service; 30 percent will by the end of 2004, and almost 40 percent by the end of 2005. In addition, the FCC reported a 26 percent nationwide increase in residential and small business broadband lines during the six-month period between June 2003 and December 2003.

⁴⁴ See NCTA, Industry Overview: Statistics & Resources, http://www.ncta.com/Docs/PageContent.cfm?pageID=86; see also C. Moffett, et al., Bernstein Research Call, Broadband Update: Narrower "Availability Gap" Points to RBOC/Cable Share Stabilization at 6 (Aug. 25, 2004).

⁴⁵ See C. Moffett, et al., Bernstein Research Call, Broadband Update: Narrower "Availability Gap" Points to RBOC/Cable Share Stabilization at Exhibit 1 (Aug. 25, 2004) (2Q04 subscribers); J. Halpern, et al., Bernstein Research Call, Broadband Update: DSL Share Reaches 40% of Net Adds in 4Q at Exhibit 1 (Apr. 8, 2004) (estimate for 2004-2005); J. Halpern, et al., Bernstein Research Call, Broadband Update at Exhibit 1 (Mar. 10, 2004) (estimate of households).

⁴⁶ See Ind. Anal. & Tech. Div., Wireline Competition Bureau, FCC, High-Speed Services for Internet Access: Status as of December 30, 2003 at Table 4 (rel. June 8, 2004).

- 39. Customers are subscribing to cable modem service even more rapidly in Verizon's service areas. In states served by Verizon, according to the FCC's numbers, there were more than 11 million cable modem subscribers by the end of 2003, which reflects a 46 percent increase in cable modem subscribers in the last year alone. See Exhibit 4.
- 40. Voice telephone service offered through VoIP competes directly with traditional telephone service. It reflects the future of voice telephone service.
- 41. For each of Verizon's 50 top MSAs, Verizon has prepared a chart that compares the prices and features of voice telephone service offerings of several leading competitors, including VoIP providers. *See* Exhibit 2. The service packages listed on these charts are those most prominently featured in advertising materials and are most comparable between service providers. Verizon obtained the information for these charts from the service providers' websites, tariffs and other publicly available information. These charts show that VoIP offerings are very competitive.
- 42. VoIP service is typically priced 30-40 percent or more below comparable narrowband (circuit-switched) offerings. And narrowband prices have not increased even though long distance carriers have abandoned their UNE-P offerings in favor of their VoIP offerings. In New York, for example, AT&T offers VoIP service for \$29.99

⁴⁷ See generally J. Halpern, et al., Bernstein Research, U.S. Telecom and Cable: Flat-Rate Pricing Signals Telephony Voice ARPU Compression at 3 (Apr. 8, 2004) ("By entering with pricing that is 30%+ below prevailing RBOC rates, cable operators are setting benchmarks that will be difficult for incumbent telcos to match.").

⁴⁸ See, e.g., J. Breen, et al., Thomas Weisel Partners, Telecom Pricing Survey: Local Voice Stable Despite VOIP; Video and HSD Heating Up at Executive Summary (Sept. 15, 2004) ("Voice – Local traditional telephone service and long distance pricing have held steady since our last survey. The real competition in this area is coming from VoIP where pricing is very aggressive.").

per month, compared to \$54.95 per month for its comparable UNE-P-based offering. See Exhibit 2. Moreover, AT&T and other VoIP providers also are now offering significant promotional discounts to attract new subscribers. AT&T recently lowered the price of VoIP service – its second price reduction in four months – from \$34.99 to \$29.99. Vonage lowered the price of its most popular package from \$34.99 to \$29.99 in May 2004, and then again to \$24.99 in reaction to AT&T's price cut in September. Expression of the second price cut in September.

- 43. Time Warner offers a bundled package of local and long distance service for \$39.95. See Exhibit 2.
- 44. Cablevision offers a similar package for \$34.95. See Exhibit 2. In addition, Cablevision also recently introduced a bundled package of local and long distance, high speed Internet access, and digital cable for \$89.85 about the same price it previously charged for high speed access and digital cable alone.⁵³

⁴⁹ See, e.g., AT&T News Release, AT&T Lowers Price of Its Residential VoIP Service (Sept. 30, 2004) (AT&T will provide the first month of service free to new subscribers who sign up before January 31, 2005); Lingo, Home Plans, https://www.lingo.com/guWeb/com/primustel/gu/presentation/residential/ResidentialCon troller.jpf (Lingo offers one month free for a savings of \$19.95); VoicePulse, Plans, http://www.voicepulse.com/plans/default.aspx (VoicePulse offers a savings of more than \$70 for the first year with a one-year contract); This Just In; Circuit City Dials Vonage for VoIP Phone Service, Multichannel News (Mar. 8, 2004) (Circuit City offers customers two months of free service and activation when they purchase starter kits and sign up for Vonage service).

⁵⁰ AT&T News Release, AT&T Lowers Price of Its Residential VoIP Service (Sept. 30, 2004); AT&T News Release, AT&T CallVantage Service Expands To Serve 10 Major Markets in Florida (June 14, 2004).

⁵¹ Vonage Press Release, Vonage Drops Residential Premium Unlimited Plan by \$5 to \$29.99 (May 17, 2004).

⁵² See J. Hyde, AT&T, Vonage Cut Prices on Internet Calling, Reuters (Sept. 30, 2004). Vonage also announced that it would upgrade customers subscribing to an existing \$25 plan for limited minutes, to an unlimited plan for no extra charge. *Id.*

⁵³ See ¶ 20, supra.

- 45. Vonage offers an unlimited local and long distance package for only \$24.99.⁵⁴ Lingo, Packet8, and BroadVoice offer similar packages for \$19.95. See Exhibit 2.
- 46. For customer who have not yet subscribed to broadband service, the combination of broadband service and VoIP is competitive with what customers pay for a narrowband bundle of local, long distance and dial up Internet access. As shown in Exhibit 5, the price for cable modem service plus VoIP typically is in the range of \$62 to \$90 per month. For example, a customer in New York City could obtain cable modem service from Time Warner for \$45 (for standard cable subscribers) or \$60 (for non-cable subscribers), ⁵⁵ and VoIP service from a number of providers including Packet8 for \$20, AT&T for \$30, or Time Warner for \$40. ⁵⁶ This is comparable to the price for dial up Internet access plus a bundled local and long distance plan. The same customer in New York City could spend \$10 to \$22 for dial up service depending on the ISP, ⁵⁷ and \$50-\$60 for the bundled voice plan, ⁵⁸ which may incur taxes and surcharges of up to \$13. For the some 38 million U.S. households ⁵⁹ (34 percent) using dial up Internet access, VoIP is competitive.

⁵⁴ See AT&T. Vonage Cut Prices on Internet Calling, Reuters (Sept. 30, 2004).

⁵⁵ Time Warner Cable, *Road Runner: Rates*, http://www3.twcnyc.com/NASApp/CS/ContentServer?pagename=twcnyc/internet&myse ct=internet/rates.

⁵⁶ See Exhibit 2.

⁵⁷ See Exhibit 5, n.2.

⁵⁸ See Exhibit 2.

⁵⁹ R. Bilotti, et al., Morgan Stanley, Broadband Update: Bundling Is an Arms Race, Not a Price War at Exhibit 7 (July 8, 2004) (excluding dial up subscribers that also use broadband).

- 47. Even at these low rates, VoIP providers are reporting spectacular profit margins. Cablevision has reported its margins at 40-45 percent, with a capital payback of 10 months. Vonage has reported its margins at 70 percent, headed to 80 percent. Kagan estimates that a cable company VoIP providers will have cash flow margins of 40 percent. Wall Street analysts are making similar projections.
- 48. VoIP is rapidly gaining acceptance as a replacement for primary telephone service. The majority of customers purchasing VoIP from their cable operator are purchasing it as a primary line replacement. For example, some 86 percent of Time Warner's Digital Phone subscribers reportedly bring their old phone number with them when they sign up.⁶⁴ Approximately, 50 percent of Vonage customers bring their old phone number when they sign up.⁶⁵

⁶⁰ See, e.g., Tom Rutledge, Chief Operating Officer, Cablevision, presentation at the Deutsche Bank Media Conference at 29 (June 7, 2004).

⁶¹ See D. Barden, et al., Banc of America Securities, Straight Talk on VoIP at 2, 5 (Apr. 15, 2004).

⁶² Kagan, Cable VoIP Outlook: Q1 '04 Sector Update at 9 (Jan. 2004).

⁶³ See, e.g., G. Campbell, et al., Merrill Lynch, Everything over IP: VoIP and Beyond at 17 (Mar. 12, 2004) ("We believe that margins on VoIP service could be very high (depending on where pricing and regulation end up) For cable operators, we believe that incremental service margins on VoIP can be comparable to HSD service margins (i.e., 60%-plus at scale, assuming current pricing) and significantly better than cable TV margins.").

⁶⁴ Glenn Britt, Chairman & CEO, Time Warner Cable, Presentation to UBS Media Week Conference at slide 24 (Dec. 11, 2003); see also C. Moffett, et al., Bernstein Research Call, Cable and Telecom: Bernstein Study Finds Consumers Ready and Willing To Switch to Cable Telephony at 4 (Dec. 9, 2003) ("80-90% of Time Warner's customers in Portland are opting to keep their existing number.").

⁶⁵ See J. Hodulik, et al., UBS Investment Research, The Vonage Story: The Who, What, Where, and How at 5 (Nov. 24, 2003); A. Quinton, et al., Merrill Lynch, US VoIP Update: Competitive, Regulatory, and Other Issues at 9 (Nov. 25, 2003).

49. In addition, consumer surveys report a very high interest in VoIP service. In a recent Gallup Poll, "[r]oughly 34% of respondents that do not have VoIP [said they] would switch from their existing landline service to VoIP for cost savings." In addition, AT&T's Customer Insights Group indicated that "three out of four adults have heard of [VoIP] technology," and "[a]mong current 'non users' aware of VoIP services, 76 percent would consider actually implementing the service in the next year, depending on the price and package offering." Of that 76 percent of respondents, 63 percent would consider VoIP to replace a primary line. 68

Wireless Carriers.

- 50. Wireless carriers are now competing with wireline carriers both for local access lines and, even more extensively, for local and long-distance calls. As a general matter, wireless service is displacing landline telephone service. Approximately 97 percent of households are located in counties that also are served by three or more wireless competitors.⁶⁹
- 51. Since the *Triennial Review* proceeding, the number of wireless subscribers has grown from 129 million to 161 million, and the number is continuing to grow at 20 million new wireless subscribers each year. *See* Exhibit 6. By contrast, there are

⁶⁶ J. Hodulik, et al., UBS, Gallup Survey Highlights VoIP Potential at 1 (Apr. 8, 2004).

⁶⁷ AT&T News Release, AT&T-Sponsored Survey Highlights Consumer Interest and Awareness in Voice over the Internet Services (VoIP) (Mar. 2, 2004); AT&T Customer Insights Group, VoIP PR Research: Public Opinion on VoIP at 6, 12 (Jan. 2004).

⁶⁸ AT&T Customer Insights Group, VoIP PR Research: Public Opinion on VoIP at 12 (Jan. 2004).

⁶⁹ Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Ninth Report, A-9 at Table 5, WT Docket No. 04-111, FCC 04-216 (rel. Sept. 28, 2004) ("Ninth CMRS Report").

approximately 181 million wireline access lines, and that number is declining each year.⁷⁰

Analysts accordingly expect that "the number of cell phone users will exceed the number of US wireline access lines some time during 2005."⁷¹

- 52. An increasing share of wireless subscribers are abandoning their wireline phones. Analysts estimate that by year-end 2004, approximately 11 million primary wireline access lines will have already been displaced by wireless, and that number is expected to reach about 22 million by the end of 2008. See Exhibit 7.
- 53. Growing numbers of wireless subscribers are abandoning their wireline service in favor of their wireless service. Since the *Triennial Review* proceeding, the percentage of wireless users that have given up wireline service has grown from 3-5 percent to 7-8 percent. *See* Exhibit 6. Approximately 2.7 million additional wireless subscribers are now giving up their wireline phones each year. At least 14 percent of U.S. consumers now use their wireless phone as their primary phone. 73

⁷⁰ See, e.g., Ind. Anal. & Tech. Div., Wireline Competition Bureau, FCC, Local Telephone Competition: Status as of June 30, 2003 at Table 1 (Dec. 2003) (End-user switched access lines have declined steadily since their peak in December 2000).

Adam Quinton, Managing Director & First Vice President, Co-Head of Global Telecom Services Research, Merrill Lynch, prepared witness testimony before the Subcommittee on Telecommunications and the Internet of the House Energy and Commerce Committee, Washington, DC (Feb. 4, 2004).

⁷² See B. Bath, Lehman Brothers, Consumer VoIP Threat Overdone at Figure 2 (July 1, 2004).

⁷³ C. Wheelock, In-Stat/MDR, Cutting the Cord: Consumer Profiles and Carrier Strategies for Wireless Substitution at 1 (Feb. 2004) ("14.4% of US consumers currently use a wireless phone as their primary phone").

- 54. And even larger percentages of young consumers which will make up the next generation of homeowners are disconnecting their wireline service, which make it likely that the rate of substitution will increase even further in the future.⁷⁴
- displace telephone calls that previously used the switched wireline network. Wireless service packages include unlimited long distance calling, which has contributed to wireline traffic substitution and increasing average minutes of use among wireless carriers. As one article explained, "[t]hanks to unlimited night and weekend minutes . . . cellphone plans are the method of choice when it comes to long-distance calling from home." As a result, wireless service is particularly competitive for incumbent carriers' mass market switching.
- 56. Still greater amounts of traffic are migrating from wireline to wireless networks. Merrill Lynch estimates that "approximately 23% of voice minutes in 2003

⁷⁴ Frank Louthan, Vice President, Equity Research, Raymond James, prepared witness testimony before the Subcommittee on Telecommunications and the Internet of the House Energy and Commerce Committee, Washington, DC (Feb. 4, 2004) ("We believe the roughly 9.6% of the population that are single between the ages of 20 and 34 are the most likely to disconnect their wireline phone for a wireless phone (with a significant proportion of this age group having already done so). As young consumers between 15 and 19 (another 6.6% of the U.S. population) become households, we believe these households could become prime wireless substitution candidates."); A. Quinton, et al., Merrill Lynch, Telecom Services: Unraveling Revenues at 5 (Nov. 20, 2003) ("[W]e believe that demographic trends favor wireless. . . . So, as the US population ages, more young people are likely to become wireless subscribers – and either displace the purchase of a wireline service with wireless or cut the cord on an existing line."); S. Ellison, IDC, U.S. Wireline Displacement of Wireline Access Lines Forecast and Analysis, 2003-2007 at 7 (Aug. 2003) ("The first communications services purchased by youth and young adults are now often wireless services. Adoption of wireless by teenagers is increasingly being translated into forgoing traditional primary access lines when such wireless users go to college or otherwise establish their own households.").

⁷⁵ W. Mossberg, The Mossberg Solution: Turning Your Home Phone into a Cellphone – Call-Forwarding Devices Let You Use Cellular Service on a Traditional Phone, Wall St. J. at D6 (Dec. 3, 2003).

were wireless," and that in 2004 "wireless could make up approximately 29% of voice minutes in the US." Wireless voice minutes are currently rising at 36 percent per year. See Exhibit 8. By contrast, minutes on landline networks have declined.

- 57. The increase in wireless long-distance calls is even greater. The Yankee Group estimates that 43 percent of long-distance calls are now made on wireless phones.⁷⁹
- 58. By contrast, the FCC's own data show that toll minutes have declined rapidly for the industry as a whole. Average residential toll minutes per line reached a peak of 149 minutes per month in 1997, and declined to only 90 minutes per month in 2002. See Exhibit 9. In total, consumers have reduced the number of long-distance minutes of use on landline phones by 40 percent over the past five years. Id.
- 59. The long-distance carriers themselves have acknowledged that wireless service is displacing long-distance traffic and constraining prices. For example, AT&T said that "Consumer long distance voice usage is declining as a result of substitution to wireless services, internet access and e-mail/instant messaging services, particularly in

⁷⁶ D. Janazzo, et al., Merrill Lynch, The Next Generation VIII: The Final Frontier? at 5 (Mar. 15, 2004); Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Eighth Report, 18 FCC Rcd 14783, ¶ 102 (2003) ("One analyst estimates that wireless has now displaced about 30 percent of total wireline minutes.").

Adam Quinton, Managing Director & First Vice President, Co-Head of Global Telecom Services Research, Merrill Lynch, prepared witness testimony before the Subcommittee on Telecommunications and the Internet of the House Energy and Commerce Committee, Washington, DC (Feb. 4, 2004).

⁷⁸ See, e.g., Ind. Anal. & Tech. Div., Wireline Competition Bureau, FCC, Trends in Telephone Service at Table 10.1 (Aug. 2003); S. Flannery, et al., Morgan Stanley, Telecom Services: Trend Tracker: Spring Break! Some Temporary Telecom Relief at 23 (Mar. 18, 2004).

⁷⁹ Yankee Group News Release, U.S. Consumer Long Distance Calling Is Increasingly Wireless, Says Yankee Group (Mar. 23, 2004).

the 'dial one' long distance, card and operator services segments." MCI made the same observation: "[W]ireless telephone companies, such as Verizon Wireless, Cingular, Sprint PCS, AT&T Wireless, Nextel and T-Mobile . . . have increased their network coverage, improved service quality, started to provide bundled wireless products and lowered prices to end users. As a result, customers are beginning to substitute wireless services for basic wireline service causing these companies to gain market share from providers of wireline voice communications." In addition, Gary Forsee, Chairman and Chief Executive Officer of Sprint, conceded that wireline rates will not increase: "There is so much competition for the consumer dollar, it is hard for me to imagine a scenario where the local service component goes up, and certainly not the long-distance component. The RBOCs don't have that flexibility, given that cable is trying to come in."

60. Wireless carriers also now offer a variety of data services that compete for data traffic. For example, narrowband wireless data capabilities that offer speeds of between 50-130 kbps are now available nearly every place wireless voice service is available, which is to say the vast majority of the country. A large and increasing share of wireless subscribers are now using phones that are capable of using these new data

⁸⁰ AT&T Corp., Form 10-K (SEC filed Mar. 15, 2004).

⁸¹ MCI Inc., Form 10-K (SEC filed Apr. 29, 2004).

⁸² P. Howe, Sprint CEO Discusses Changes in Telephone Industry, Boston Globe at 1 (June 27, 2004).

⁸³ See Ninth CMRS Report ¶ 138 ("CDMA 1xRTT and/or 1xEVDO has been launched in at least some portion of counties containing 273 million people, or roughly 96 percent of the U.S. population, while GPRS has been launched in at least some portion of counties containing 264 million people, or about 93 percent of the U.S. population.").

capabilities⁸⁴ as well as actually subscribing to the data services they make possible.⁸⁵ In addition, wireless carriers are now beginning to deploy broadband capabilities that are comparable to cable and DSL.⁸⁶

⁸⁴ M. McCormack, et al., Bear Stearns, Verizon Communications: Growth Businesses Highlight in Line Quarter at 8 (Apr. 27, 2004) (Verizon "reported that 63% of the customer base has 1X-enabled phones compared with 52% in 4Q03."); Sprint, Investor Update 1Q2004 at 15 (Apr. 20, 2004) (Sprint reports that 80% of the "post-paid retail customer base" is using 1xRTT handsets and 48% of the same base are using PCS Vision handsets.).

⁸⁵ C. Fleming, et al., UBS Investment Group, AT&T Wireless Group Inc.: Weak, But Not Disastrous 1004 Results at 4 (Apr. 26, 2004) ("[AT&T Wireless] said that more than 40% of its GSM customers sign up for GPRS service (i.e., mMode). This compares to the "over 35%" figure cited last quarter. AWE said that these customers pay, on a monthly basis, in the \$6.50 - \$7 range (versus the about \$7 - \$8 monthly range cited last quarter) for mMode services. Also, AWE said that it is collecting over \$3.75 of SMS revenue monthly from almost one quarter of its total customer base."); Sprint Press Release, Sprint Reports First Quarter Results (Apr. 20, 2004) ("At the end of the period more than six million customers were subscribing to Sprint PCS data services, including more than four million Sprint PCS Vision customers."); id. (55% of gross adds in the first quarter were PCS Vision customers.); Cingular Wireless News Release, Cingular Wireless Reports First-Quarter Results: Solid Subscriber Growth, Improved Margins, Continued GSM Success (Apr. 20, 2004) ("Cellular/PCS data revenue increased 53 percent yearover-year, largely due to the rising popularity of text messaging. . . . Cingular delivered more than 1.3 billion text messages during the quarter, almost double the volume in the first quarter of 2003.").

⁸⁶ See Verizon Wireless Press Release, Verizon Wireless Expands BroadbandAccess 3G Network To Cover 14 Markets from Coast to Coast (Sept. 22, 2004) (34 million Americans in 14 markets are able to access Verizon Wireless's EV-DO service; Verizon Wireless is "on target" to expand its EV-DO offering to cover one-third of its network (approximately 75 million Americans) by the end of 2004. Verizon has committed to invest \$1 billion over the next two years to rollout the service nationwide.); Sprint Press Release, Sprint Announces Plans to Extend Its Wireless Data Leadership with Launch of High-Speed Wireless Data Technology (June 22, 2004) (Sprint will deploy EV-DO in select markets in second half of 2004, and launch in the majority of top metropolitan markets in 2005); C. Larsen, et al., Prudential Equity Group, LLC, Telecom Services: Wireless Broadband Channel Checks and Outlook (June 28, 2004) ("Nextel is currently selling wireless broadband service in the Raleigh/Durham area"); AT&T Wireless Press Release, AT&T Wireless Delivers 3G UMTS Service in the United States (July 20, 2004); AT&T Wireless Press Release, AT&T Wireless Extends 3G UMTS Service to Dallas and San Diego (Sept. 1, 2004) (AT&T Wireless launched a wireless network using UMTS technology in Detroit, Phoenix, San Francisco, Seattle, Dallas, and San Diego. Cingular will begin UMTS trials in Atlanta this summer and "could begin rolling out in 2005").